<u>PATENT</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

plicant: Kie Y

Kie Y. Ahn et al.

Examiner: Douglas A. Wille

Serial No.:

10/081,439

Group Art Unit: 2818

Filed:

February 20, 2002

Docket: 1303.046US1

Title:

EVAPORATED LAAIO3 FILMS FOR GATE DIELECTRICS

COMMUNICATION CONCERNING RELATED APPLICATION(S)

MS RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Applicants would like to bring to the Examiner's attention the following related application(s) in the above-identified patent application:

Serial/Patent No. 09/944981	Filing Date August 30, 2001	Attorney Docket 1303.021US1	Title CRYSTALLINE OR AMOPHOUS MEDIUM-K GATE OXIDES, Y203 AND Gd203
09/945535	August 30, 2001	1303.026US1	HIGHLY RELIABLE AMORPHOUS HIGH-K GATE OXIDE ZrO2
10/028643	December 20, 2001	1303.030US1	LOW-TEMPERATURE GROWN HIGH QUALITY ULTRA-THIN CoTiO3 GATE DIELECTRICS
10/052983	January 17, 2002	1303.031US1	HIGHLY RELIABLE AMORPHOUS HIGH-k GATE DIELECTRIC ZrOxNy
10/027315 6740581	December 20, 2001	1303.033US1	LOW-TEMPERATURE GROWN HIGH- QUALITY ULTRA-THIN PRASEODYMIUM GATE DIELECTRICS
10/099194	March 13, 2002	1303.044US1	EVAPORATION OF Y-Si-O FILMS FOR MEDIUM-k DIELETRICS
10/137499	May 2, 2002	1303.050US1	ATOMIC LAYER-DEPOSITED LaAlO3 FILMS FOR GATE DIELETRICS
10/163481	June 5, 2002	1303.056US1	ATOMIC LAYER-DEPOSITED HFAIO3 FILMS FOR GATE DIELECTRICS

COMMUNICATION CONCERNING RELATED APPLICATIONS Serial Number: 10/081,439 Filing Date: February 20, 2002 Title: EVAPORATED LAAIO3 FILMS FOR GATE DIELECTRICS

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Title. EVALORATED	LAAIO3 I ILMS I OR C	THE BIBBECT HICE	
10/163686	June 5, 2002	1303.059US1	Pr2O3-BASED La-oxide GATE DIELECTRICS
10/209581	July 30, 2002	1303.061US1	ATOMIC LAYER DEPOSITED NANOLAMINATES OF HfO2/ZrO2 FILMS AS GATE DIELECTRICS
10/219870	August 15, 2002	1303.069US1	LANTHANIDE DOPED TIOX DIELECTRIC FILMS BY PLASMA OXIDATION
10/219878	August 15, 2002	1303.070US1	LANTHANIDE DOPED TiOx DIELECTRIC FILMS
10/229903	August 28, 2002	1303.078US1	ATOMIC LAYER DEPOSITED HISION DIELECTRIC FILMS
10/233309	August 29, 2002	1303.079US1	ATOMIC LAYER DEPOSITED LANTHANIDE DOPED TiOx DIELECTRIC FILMS
10/309583	December 4, 2002	1303.082US1	ATOMIC LAYER DEPOSITED ZR-SN- TI-O FILMS USING TiI4
10/309935	December 4, 2002	1303.083US1	ATOMIC LAYER DEPOSITED Zr-Sn-Ti-O FILMS
10/379470	March 4, 2003	1303.090US1	ATOMIC LAYER DEPOSITED DIELECTRIC LAYERS
10/403734	March 31, 2003	1303.092US1	ATOMIC LAYER DEPOSITED ZrAlxOy DIELECTRIC LAYERS
10/420307	April 22, 2003	1303.097US1	ATOMIC LAYER DEPOSITED ZrTiO4 FILMS
10/602323	June 24, 2003	1303.101US1	LANTHANIDE OXIDE / HAFNIUM OXIDE DIELECTRIC LAYERS
10/602315	June 24, 2003	1303.107US1	LANTHANIDE OXIDE / HAFNIUM OXIDE DIELECTRICS
09/779959	February 9, 2001		

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Serial Number: 10/081,439 Filing Date: February 20, 2002

Title: EVAPORATED LAAIO3 FILMS FOR GATE DIELECTRICS

09/838335 09/881408 09/908767	April 20, 2001 June 13, 2001 July 18, 2001		
10/765619	January 27, 2004	1303.033US2	LOW-TEMPERATURE GROWN HIGH- QUALITY ULTRA-THIN PRASEODYMIUM GATE DIELECTRICS
10/768597	January 30, 2004	1303.033US3	LOW-TEMPERATURE GROWN HIGH- QUALITY ULTRA-THIN PRASEODYMIUM GATE DIELECTRICS
10/789042	February 27, 2004	1303.050US2	ATOMIC LAYER-DEPOSITED LaAlO3 FILMS FOR GATE DIELETRICS
10/789044	February 27, 2004	1303.070US2	LANTHANIDE DOPED TiOx DIELECTRIC FILMS

Respectfully submitted,

KIE Y. AHN ET AL.

By Applicants' Representatives,

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Date 17 June 2004 B

David R. Cochran

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<u>CERTIFICATE UNDER 37 CFR 1.8:</u> The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: MS RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this <u>17th</u> day of <u>June</u>, 2004.

Amy Moriarty

Signature

<u>S/N 10/081,439</u> <u>PATENT</u>

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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INFORMATION DISCLOSURE STATEMENT

S RCE

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 et. seq., the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(b), it is believed that no fee or statement is required with the Information Disclosure Statement.

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

KIE Y. AHN ET AL.

By their Representatives,

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

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Name Amy Moriarty

Signature

PTC/SB/08A(10-01)
Approved for use through 10/31/2002. OMB 551-0031
US Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1985, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Substitute for form 1449A/PTO Complete if Known INFORMATION DISCLOSURE **Application Number** 10/081,439 STATEMENT BY APPLICANT Filing Date February 20, 2002 (Use as many sheets as necessary) Ahn, Kie First Named Inventor **Group Art Unit** 2818 Wille, Douglas **Examiner Name** JUN 2 1 2004

Attorney Docket No: 1303.046US1 Sheet 1 of 1

		US PA	ATENT DOCUMENT	S		
Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate
	US20020111001	08/15/2002	Ahn, Kie Y., et al.	438	592	02/09/2001
1.00.	US20040033701A1	02/19/2004	Ahn, K. Y., et al.	438	785	08/15/2002
	US-4,058,430	11/15/1977	Suntola, T., et al.	427	255.13	11/25/1975
	US-4,725,877	02/16/1988	Brasen, Daniel, et al.	257	751	04/11/1986
	US-6,537,613	03/25/2003	Senzaki, Y., et al.	427	250	04/10/2000
	US-6,639,267	10/28/2003	Eldridge, Jerome M.	257	310	07/29/2002
	US-6,660,660	12/09/2003	Haukka, S. P., et al.	438	778	08/31/2001
	US-6,713,846	03/30/2004	Senzaki, Y.	257	635	01/25/2002
	US-6,730,575	05/04/2004	Eldridge, Jerome M.	257	310	08/30/2001

	FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Foreign Document No	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	T²

	OTHER	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

EXAMINER

DATE CONSIDERED